

AMENDMENTS TO THE CLAIMS

Patent Claims

We claim:

1. (Currently amended) Device (1) for palletizing objects, in particular empty plastic bottles (2) having a neck collar (1), comprising a transposing device (4) for forming layers (5) of the objects that are fed in rows, a pallet loader (7) transferring the layers to pallets (6), a conveyor (7, 8) situated between the transposing device (4) and the pallet loader for layers formed by the transposing device and a buffer (9) for intermediate storage of at least one layer, ~~characterized in that the transposing device (4) optionally loads one of the~~ conveyor zone (8) or the buffer (9) with objects (2) and the pallet loader (7) receives the layers of objects (2) from either the conveyor zone (8) or the buffer (9).
2. (Currently amended) Device according to Claim 1, ~~characterized in that~~ wherein the buffer (9) is arranged at least partially beside the conveyor zone (8).
3. (Currently amended) Device according to Claim 1, ~~characterized in that~~ wherein the buffer (9) is arranged at least partially beneath the conveyor zone (8).
4. (Currently amended) Device according to ~~any one of Claims Claim 1 through 3, characterized in that,~~ wherein the buffer (9) has a reversible carriage (10) for receiving at least one layer (5) of objects (2).
5. (Currently amended) Device according to ~~any one of Claims Claim 1 through 3, characterized in that,~~ wherein the buffer (9) has at least one endless conveyor chain for receiving at least one layer (5) of objects (2).
6. (Currently amended) Device according to ~~any one of Claims Claim 1 through 3, characterized in that,~~ wherein the buffer (9) has at least one container that can be handled separately for a layer (5) of objects (2).
7. (Currently amended) Device according to ~~any one of Claims Claim 1 through 6, characterized in that,~~ wherein the buffer (9) is provided with supports (11) for the objects (2).

8. (Currently amended) Device according to Claim 7, ~~characterized in that~~ wherein the supports (11) are adjustable for adaptation to different object diameters.

9. (Currently amended) Device according to ~~any one of Claims Claim 1 through 8, characterized in that, wherein~~ the conveyor zone (8) has a sliding table (12) for a layer (5) of objects (2), ~~said the~~ table being movable between the normal parking station of the transposing device (4) and the normal receiving station of the pallet loader (7).

10. (Currently amended) Device according to Claim 9, ~~characterized in that~~ wherein the buffer (9) is arranged beneath the sliding table (12) and passes by an additional parking station of the transposing device (4) as well as an additional receiving station of the pallet loader (7).

11. (Currently amended) Device according to Claim 10, ~~characterized in that~~ wherein the transposing device (4) and the pallet loader (7) ~~optionally one of~~ execute an additional stroke during which they set down the objects on the buffer (9) ~~and/or or~~ pick them up the objects from the buffer (9).

12. (Currently amended) Device according to ~~any one of Claims Claim 1 through 11, characterized in that, and~~ a distributor (13) connected upstream from the transposing device (4) continuously shapes several rows (26 through 31) of objects (2) from an incoming row of objects (2).

13. (Currently amended) Device (1) for palletizing objects, especially empty plastic bottles (2) having a neck collar (3), comprising a transposing device (4) for forming layers (5) of the objects supplied in rows, a pallet loader (7) transferring the layers to pallets (6), ~~and~~ a conveyor zone (8) arranged between the transposing device (4) and the pallet loader for the layers formed by the transposing device, and ~~characterized in that~~ a distributor (13) which is provided upstream from the transposing device (4) continuously forms several outgoing rows (26 through 31) of objects (2) from an incoming row of objects (2).

14. (Currently amended) Device according to ~~Claim 12 or Claim 13,~~ characterized in that wherein the distributor (13) has a continuously revolving conveyor chain (18) for a single-row feed of objects (2), a plurality of clamping star wheels (20 through 25) revolving in synchronization being connected one of directly or indirectly downstream from

the conveyor chain, removing the objects (2) individually from the conveyor chain (18) and distributing them among multiple paths (26 through 31).

15. (Currently amended) Device according to ~~Claim 12 or Claim 13~~, ~~characterized in that wherein~~ the distributor (13') has multiple continuously revolving conveyor chains (18, 18') for a single row supply of objects (2), several clamping star wheels (40 through 47) being connected one of directly or indirectly downstream from each, individually removing the objects (2) from the conveyor chains (18, 18') and distributing them among multiple paths (L1 through L8).

16. (Currently amended) Device according to Claim 15, ~~characterized in that wherein~~ the conveyor chains (18, 18') form a tangent to the discharge star wheel (17) of a blow molding machine (S) and are loaded alternately with objects (2) by the controllable gripper arms (G) of the discharge star wheel.

17. (Currently amended) Device according to ~~any one of Claims Claim 14 through 16, characterized in that, wherein each of~~ the conveyor ~~chain(s) chains~~ (18, 18') is ~~(are)~~ equipped with individually controllable gripper tongs (19') for targeted gripping and release of one object (2) at a time.

18. (Currently amended) Device according to ~~any one of Claims Claim 14 through 17, characterized in that, wherein each of~~ the conveyor ~~chain(s) chains~~ (18, 18') has ~~(have)~~ a curved path in the transfer area to the clamping star wheels (40 through 47).

19. (Currently amended) Device according to ~~any one of Claims Claim 14 through 18, characterized in that, and~~ at least one clamping star wheel (48 through 51) that can be driven in synchronization is provided for one of at least one conveyor chain (18, 18') ~~and/or or~~ at least one clamping star wheel (43, 47) for input of objects (2) from a storage device (59) ~~or the like~~ into one of the conveyor chain (18, 18') ~~and/or or~~ into the clamping star wheels.

20. (Currently amended) Device according to ~~any one of Claims Claim 15 through 19, characterized in that, and~~ a transfer device (50, 52) for transferring objects (2) between one of the conveyor chains (18, 18') ~~and/or or~~ the clamping star wheels assigned to them.